

ABSTRACT OF THE DISCLOSURE

A method and apparatus for randomly selecting which of a plurality of memory modules data packets are to be written to in a network packet buffer.

- 5 Memory modules are coupled in parallel to effectively increase the overall memory bandwidth. In order to minimize latency, each time an incoming packet is received by the network switch, a scheduler randomly selects one of the memory modules to which that packet is to be stored upon. And because the data is randomly distributed amongst the different memory modules,
- 10 read operations will be similarly random across all memory modules. This ensures minimal read latencies when reading data from the memories. Thereby, the delays are minimized.

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